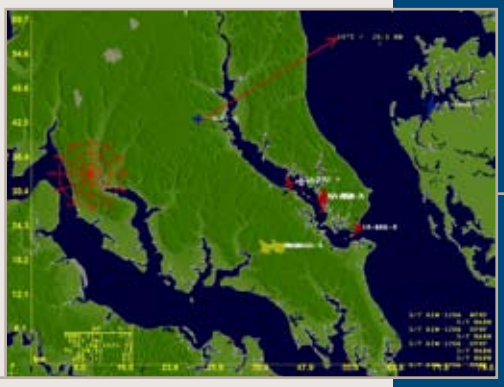
PCDS Personal Computer Debriefing System

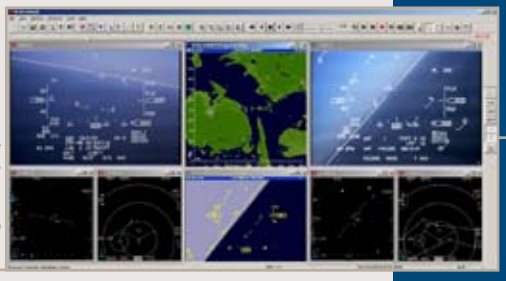
The Personal Computer Debriefing System (PCDS) is a Windows-based, user-friendly, stand-alone flight debriefing system. Data from various tracking sources can be recorded and replayed to provide the briefer with a comprehensive operational debriefing capability. The state-of-the-art synchronized digital video replay capability makes PCDS the F-16 pilot's debriefing tool of choice for the Air National Guard (ANG), Air Combat Command (ACC) and European Participating Air Forces (EPAF).

In addition to the 3-D graphic displays, PCDS also provides a user-configurable tabular display of parameter and pairing data. Software installation provides CONUS map coverage (which includes Hawaii and portions of Alaska) and tools for merging, reducing and transferring PCDS recorded data files.



Plan view with overlays

Using the Live Monitor capability, as the real-time picture is displayed, PCDS can record data locally for replay and/or transfer to a remote site. Recorded PCDS data files are kept small and compact through the use of an efficient data packing technique and compression algorithms, thereby facilitating remote distribution via secure telephone units.



Integrated playback

Government owned and developed, PCDS is managed by NAVAIR, with the PCDS Software Support Activity (SSA) located at NAS Patuxent River, Md. Future enhancement requirements are gathered directly from the user communities; these requirements are prioritized at the annual Users' Conference in Lexington Park, Md.

for more information

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Leaders in providing decision-quality data

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capabilities

- Replays data reconstructed from a Mega-DTC to provide a rangeless "ACMI-like" debriefing capability to the F-16 Block 30/40/50 and MLU communities
- Synchronized replay with Digital Video Recorder (DVR) video and audio data
- Monitors, records and replays flight maneuvering Time Space Position Information (TSPI) data from multiple sources, including Distributed Interactive Simulation (DIS), Test and Training Enabling Architecture (TENA), Computation and Control Subsystem (CCS) and Host Range Interface Protocol (HRIP)
- Replays up to 16 channels of recorded audio
- 3-D textured surface maps using National Geospatial-Intelligence Agency (NGA) data products including Digital Terrain Elevation Data (DTED), Vector Smart Map (VMAP), and Controlled Image Base (CIB)
- Displays multiple 3-D, video, tabular and pairing views simultaneously
- COM interface with FalconView to use map and overlay data within PCDS
- Synchronized replay with TEAC Hi-8 Tape Controller interface
- Designed to play up to 1000 concurrent air, land, weapon and sea tracks, bomb impact points, threats and terrain (full capacity dependant on system processor power and memory)

Requirements

Please note that these are the **minimum** *system requirements to use PCDS. Please contact PCDS Technical Support for recommendations to suit individual system needs.*

Basic System Requirements

- Pentium 3 microprocessor
- OpenGL compatible 64 MB graphics card with hardware acceleration
- Microsoft Windows NT/2000/XP
- 512 MB RAM

Digital Video Capability Requirements

(4 concurrent digital video views)

- 3.0 GB Pentium 4 microprocessor
- OpenGL compatible 256 MB graphics card with hardware acceleration
- Microsoft Windows 2000/XP
- Microsoft DirectX 9.0
- USB 2.0 Port(s)
- 2 GB RAM

development & application

PCDS was initially designed to support Tactical Aircrew Combat Training System (TACTS) and Air Combat Training System (ACTS) training ranges. The aspirations of the development and support team led to a redesign using an object-oriented methodology. The result is an increasingly popular software application that is easy to use and deploy, with the true look and feel of Windows software.

PCDS is currently

- Providing a "Virtual ACMI Range" capability for the F-16 Block 30/40/50 by merging data recorded onboard each aircraft's Digital Transfer Cartridge (Mega-DTC) and integrated replay of recorded digital video
- Supporting several Joint National Training Center (JNTC) large-scale exercises to monitor and record training scenarios
- Used as a monitoring and engineering tool on board the Joint Strike Fighter (JSF) Cooperative Avionics Test Bed (CATB) and in the lab at Eglin AFB to support flight-testing operations
- Providing F-16 Aircrew Training Devices (ATD) Link Trainer Debriefing at Springfield ANGB, Ohio